

## Title (en)

NON-PVC FILM AND NON-PVC FILM LAMINATE

## Title (de)

PVC-FREIE FOLIE UND PVC-FREIES FOLIENLAMINAT

## Title (fr)

FILM SANS POLY(CHLORURE DE VINYLE) ET STRATIFIÉ DE FILM SANS POLY(CHLORURE DE VINYLE)

## Publication

**EP 2542409 B1 20181219 (EN)**

## Application

**EP 11707768 A 20110304**

## Priority

- US 31037810 P 20100304
- US 2011027154 W 20110304

## Abstract (en)

[origin: WO2011109692A1] The present invention relates to a non-PVC film and film laminate for use in marketing, advertising campaigns, particularly outdoor or other environment impacted promotions and safety applications. The film is in one exemplary embodiment includes two layers, a top layer and a bottom layer. The top layer is a urethane-acrylic hybrid polymer and the bottom layer is a non-PVC based polymer. The film may be transparent, translucent, clear or have other desirable optical properties.

## IPC 8 full level

**B32B 27/00** (2006.01)

## CPC (source: EP KR US)

**B32B 7/12** (2013.01 - EP US); **B32B 27/00** (2013.01 - EP US); **B32B 27/08** (2013.01 - EP KR US); **B32B 27/18** (2013.01 - KR); **B32B 27/30** (2013.01 - KR); **B32B 27/308** (2013.01 - EP US); **B32B 27/40** (2013.01 - EP KR US); **B44F 1/066** (2013.01 - KR US); **G09F 3/10** (2013.01 - US); **B32B 2270/00** (2013.01 - EP US); **B32B 2307/406** (2013.01 - EP US); **B32B 2307/412** (2013.01 - EP KR US); **B32B 2307/414** (2013.01 - EP US); **B32B 2307/50** (2013.01 - EP US); **B32B 2307/54** (2013.01 - EP US); **B32B 2307/546** (2013.01 - EP US); **B32B 2307/584** (2013.01 - EP US); **B32B 2307/71** (2013.01 - EP US); **B32B 2307/712** (2013.01 - EP US); **B32B 2307/732** (2013.01 - EP US); **B32B 2307/75** (2013.01 - EP US); **B32B 2413/00** (2013.01 - EP US); **B32B 2451/00** (2013.01 - EP US); **B32B 2457/00** (2013.01 - EP US); **B32B 2519/00** (2013.01 - EP US); **B32B 2553/00** (2013.01 - EP US); **B32B 2605/00** (2013.01 - EP US); **Y10T 428/1476** (2015.01 - EP US); **Y10T 428/24802** (2015.01 - EP US); **Y10T 428/2848** (2015.01 - EP US); **Y10T 428/31551** (2015.04 - EP US)

## Citation (examination)

US 5422189 A 19950606 - WARNER ROBERT W [US], et al

## Citation (opposition)

Opponent : Eun-Suk Choi

- JP 2008238481 A 20081009 - MITSUBISHI CHEM CORP, et al
- JP 2003276133 A 20030930 - DAINIPPON PRINTING CO LTD
- US 2001051265 A1 20011213 - WILLIAMS SCOTT A [US], et al
- WO 2005068195 A2 20050728 - 3M INNOVATIVE PROPERTIES CO [US]
- US 6077648 A 20000620 - NAIR MRIDULA [US], et al
- US 2004197572 A1 20041007 - BELL DAVID [GB]
- WO 9214768 A1 19920903 - BAXENDEN CHEM [GB]
- US 2010009108 A1 20100114 - SHIH FRANK Y [US]
- US 4198330 A 19800415 - ALOIA ROMEO R [US], et al
- US 4644030 A 19870217 - LOEWIGKEIT PETER [US], et al
- US 2008199704 A1 20080821 - HO CHARLIE C [US], et al
- JP 2002322359 A 20021108 - NITTO DENKO CORP
- ANONYMOUS: "Air Products Introduces Hybrid Waterborne Resins at ICE", 14 November 2003 (2003-11-14), pages 1 - 2, XP055643259, Retrieved from the Internet <URL:https://coatings.specialchem.com>

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## DOCDB simple family (publication)

**WO 2011109692 A1 20110909**; AU 2011222600 A1 20121004; BR 112012022175 A2 20161025; CN 102869501 A 20130109; CN 102869501 B 20160518; EP 2542409 A1 20130109; EP 2542409 B1 20181219; ES 2712893 T3 20190516; JP 2013521162 A 20130610; JP 2017100455 A 20170608; JP 6434547 B2 20181205; KR 20130037670 A 20130416; MX 2012010210 A 20121003; MX 344924 B 20170111; PL 2542409 T3 20190531; RU 2012142182 A 20140410; RU 2571140 C2 20151220; US 10703131 B2 20200707; US 2012088054 A1 20120412; US 2014017433 A1 20140116

## DOCDB simple family (application)

**US 2011027154 W 20110304**; AU 2011222600 A 20110304; BR 112012022175 A 20110304; CN 201180020489 A 20110304; EP 11707768 A 20110304; ES 11707768 T 20110304; JP 2012556258 A 20110304; JP 2017013940 A 20170130; KR 20127025678 A 20110304; MX 2012010210 A 20110304; PL 11707768 T 20110304; RU 2012142182 A 20110304; US 201113040642 A 20110304; US 201314028492 A 20130916